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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,982

12/28/2005

Emmanuel Bourgeois

Serie 6335

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7590

06/09/2008

AIR LIQUIDE

Intellectual Property

2700 POST OAK BOULEVARD, SUITE 1800

HOUSTON, TX 77056

EXAMINER

NIESZ, JASON KAROL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,982	Applicant(s) BOURGEOIS ET AL.	
	Examiner JASON K. NIESZ	Art Unit 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 gives no indication of what the sub-range values are.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 8, 10, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (US Patent 6,216,719) in view of Poulsen (US Patent 4,657,055).

In Re claim 5 with reference to Figure 2 Meyer discloses a system for the transfer of pressurized fluids comprising: a pressurized fluid supply pump (56) (Column 4, lines 39-41) that can be connected via a filling hose (72) (Column 4, lines 55-57) to a fluid inlet (78) on a storage tank (74) (Column 4, lines 61-63). Meyer also discloses a pump control unit (92) (Column 5, lines 58-60) coupled to a pressure sensor (90) (Column 5, lines 4-5) that can be connected to a pressure tapping (Column 4, lines 66- Column 5

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line 1) located at a hose fitting adjacent to the storage tank. The examiner notes that, “an opening therethrough (sic) to which will be attached a small quarter inch pressure hose,” constitutes a pressure tapping. The examiner further notes that a pressure tapping located at the hose coupling (86) is functionally equivalent to a pressure tapping on the storage tank. Meyer also discloses programmable logic (Column 8, lines 47-57) which opens and closes the supply pipe for the fluid.

Meyer doesn't disclose the use of the programmable logic to restrict the pump from activating unless the pressure measured is within a predetermined range.

The examiner notes that closing the supply pipe has the same effect on the system as not allowing the pump to operate.

Poulsen discloses a cylinder filling system in which the filling operation is suspended unless the pressure in the receiving tank lies within a predetermined set of limits (Column 10, lines 9-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the programmable logic of the Meyer device to permit the filling operation to take place only when the tank pressure lies within a predetermined range as taught by the Poulsen reference. Furthermore it would have been obvious to one of ordinary skill in the art that this control could be exercised through the regulation of a supply valve and/or the operation of the supply pump depending on the filling setup. The benefits of filling a tank only when the measured receiver pressure lies within a certain range are well known in the art: tanks filled to a point above their maximum rated pressure pose a serious danger of rupture and

explosion, while an unusually low pressure reading can indicate several different undesirable filling conditions including a tank leak and a faulty pressure sensor.

In Re claim 8 Meyer discloses that the fluid is a gas from the air (Column 1, line 18). The examiner notes that carbon dioxide is a gas from air.

In Re claim 10 Meyer in view of Poulsen as applied to claim 5 above discloses all the limitations. The examiner notes that the permission of a filling operation only within a certain pressure range inherently includes the steps of allowing filling when the pressure value is at a lower limit of the range as well as the step of discontinuing filling when the pressure is measured above the acceptable range.

In Re claim 11 in Figure 2 Meyer discloses a secondary hose (88).

In Re claim 12 the examiner notes that the secondary hose from Meyer is not disclosed as having any sort of valve or seal at its end, and therefore, it inherently cannot be kept under pressure when it is not connected to the pressure tapping.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer in view of Poulsen in further view of Berrettini et al (US Patent 4,805,672).

In Re claim 6 Meyer in view of Poulsen as applied to claim 5 above discloses all the limitations but doesn't disclose the secondary hose connected selectively to the pressure tapping. In Figure 1 Berrettini discloses a filling system in which a secondary hose (24) used to measure pressure is selectively connected (20) to a pressure tapping on a receiver tank (Column 3, lines 7-10 and 17). Therefore, it would have been obvious to one of ordinary skill in the art to modify Meyer in view of the Poulsen device by the selectively connected secondary hose from Berrettini to connect the pressure tapping to

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the pressure sensor, in order to allow the hose to be easily disconnected for repair or replacement activities.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer in view of Poulsen in further view of Cowen (US Patent 5,062,417).

In Re claim 7 Meyer in view of Poulsen as applied to claim 5 above discloses all the limitations, but doesn't disclose a manually-disengageable (sic) non-return valve device. Cowen discloses an inline check valve that can be manually disengaged (Column 2, lines 21-25). The examiner notes that those of ordinary skill in the art commonly refer to a non-return valve as a check valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fill hose in Meyer (Figure 2, 72) with the manually-disengageable check valve from Cowen in order to regulate the movement of the fluid during transfer and then remove excess fluid from the hose after transfer is complete.

Response to Arguments

7. Applicant's arguments filed 03/20/2008 have been fully considered but they are not persuasive. The limitation that the pump is permitted to operate within a predetermined range is not limiting. The controllers from both the Meyer and Berrettini references are both capable of permitting the pumps in question to operate within a predetermined range. They are not required to limit the pump's operation to this range in order to meet the limitation as originally claimed. The examiner notes that applicant amended claim 5 to include the word "only" in recognition of this deficiency.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON K. NIESZ whose telephone number is (571)270-3920. The examiner can normally be reached on mon-fri 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason K Niesz
Examiner
Art Unit 3751

/Timothy L Maust/
for Gregory Huson, SPE of Art Unit 3751